



KING COUNTY INTERNATIONAL AIRPORT

ROUNDTABLE

Report To
King County Executive
And
King County Council

Re:
King County International Airport Master Plan

May 1998

KING COUNTY INTERNATIONAL AIRPORT ROUNDTABLE

MEMBERS

| <u>Position</u> | <u>Representing</u> | <u>Name</u> |
|-------------------------------------|---------------------------------|------------------------------|
| 1 | Georgetown | Randy Eatherton |
| 2 | West Seattle | Cathy Mooney |
| 3 | Unincorporated | Georgianne Ray |
| 4 | Magnolia/North Seattle | David Dougherty |
| 5 | Tukwila | Rosemary Unterseher |
| 6 | Renton/Kent/ South King Co. | Vacant |
| 7 | Beacon Hill/Rainier Valley | Lynn Tucker |
| 8 | Community At-Large | Charlie Cunniff ¹ |
| 9 | Business Indirect Users | Randy Banneker |
| 10 | Pilots Associations | Jim Combs (Chair) |
| 11 | Corporate Operators | Jim Bennett |
| 12 | Boeing | Frank Figg |
| 13 | Cargo Operators (UPS) | Doug Baker |
| 14 | Labor (SPEEA) | Dan Hartley |
| 15 | Small GA | Karen Walling |
| 16 | Labor (Machinists) | Larry Brown |
| Ex Officio | Federal Aviation Administration | John Current |
| | Winter, Jeffrey | |
| Airport Manager | | Cynthia Stewart |
| Airport Master Plan Project Manager | | Clare Impett |

¹ Appointment Pending

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Introduction

This purpose of this report is to provide county elected officials with the Roundtable's recommendations on the conceptual development plan phase of the Airport Master Plan.

The King County International Airport (KCIA) Roundtable was initiated in September 1997. Since September, the Roundtable has met more than a dozen times to be oriented to the Airport, develop bylaws and ground rules, receive training in interest based bargaining and review the consultant proposed conceptual development plan for the Airport Master Plan. Additionally, the Roundtable reviewed comments received on the consultant proposed conceptual development plan at a public meeting held at the Airport on February 18, 1998 and comments from the Citizens Ad Hoc Noise Committee regarding noise mitigation measures that they recommend.

While reviewing the consultant's proposal and the public comments, the Roundtable worked steadily to try and achieve consensus on its recommendations to the county elected officials. However, consensus was not always possible. Thus, this report reflects the majority opinion of the Roundtable and describes areas where there was not agreement. A minority report is being submitted under separate cover.

In summary, the Roundtable's recommendations related to the conceptual development plan – that is, the proposal which will be used as the preferred alternative in the environmental impact statement and for the FAR Part 150 Noise Remedies and Land Use Compatibility Study (Part 150 Study) - are as follows. Additional discussion of each of these recommendations is also provided in this report.

RECOMMENDATION: The conceptual development plan for the KCIA Master Plan should include the following elements:

1. **24-hour per day service at KCIA should be continued.**
2. **The nonconforming safety area at the south end of the long runway should be addressed and a conforming safety area should be established; however, in so doing, the long runway takeoff length of 10,000 feet should be maintained by adding 800 feet of pavement, provided that the impact of using this shifted runway length is mitigated by limiting use of the northernmost 800 feet to takeoffs for certification testing or weather conditions and asking all other operators to use the current runway end for takeoffs to the south; and is further mitigated by construction of an acoustical wall at the north end of the Airport.**
3. **The consultant's recommended land use allocations, which generally parallel current uses, should be accepted;**
 - **provided that current and future night time runup noises are mitigated by construction of a noise containment facility ("hush house") at a location which remains to be determined; and**

- **provided that while moving the fuel tanks to comply with safety area requirements, the tanks are also moved away from the Georgetown residential area.**

RECOMMENDATION: The Part 150 Study should consider and analyze a variety of strategies, including but not limited to the following. The Study should not result in just moving the problem and all aspects of the study should be communicated in plain-speak so that they are easily understood by the general public.

- **Incentives for operators that are less noisy and use modern technology and for those that restrict night operations**
- **Pilot training for carriers with scheduled night flights to use quieter flying techniques**
- **Caps on the accepted noise impacts**
- **Flight path changes and noise abatement procedures such as flying over the industrial area in the Kent Valley before turning when departing to the south, an over water approach from the north, minimizing reverse thrust cut-backs, delaying final flap landing configuration, and higher angles of arrival and departure**
- **Combined Sea-Tac and KCIA traffic control**
- **Installation and use of the earliest possible GPS system to be used by all aircraft flying IFR**
- **Noise abatement power settings to be used during takeoff**
- **Strategies to address low frequency vibrations in addition to noise**
- **Requirement that all operators, even those aircraft below 75,000 pounds, be Stage III**
- **Strategies to address single event impacts and not just averaged events that create conventional contours**
- **Strategies to address cumulative impacts accruing to those residing below both Sea-Tac and KCIA traffic**
- **Economic reparations for residents outside the 65 dnl contour who are significantly impacted by KCIA noise events**
- **Other facility (acoustical) remedies to protect surrounding communities should be explored**

RECOMMENDATION: The Airport should proceed with the budgeted air quality study and evaluate its recommendations.

RECOMMENDATION: The Airport should put an environmental management system in place if there is not already one and require environmental/soil testing when tenants change. In addition, the Airport should encourage its tenants to work with local government agencies to reduce and substitute for hazardous materials where possible

RECOMMENDATION: The moratorium on new and extended long-term leases which was instituted pursuant to Motion 9709 should be rescinded.

Roundtable Function

The Roundtable's role in evaluating Master Plan recommendations and putting forth its own recommendations to county elected officials comes from the charge to the Roundtable specified in Ordinance 12785:

The roundtable shall advise and make recommendations to the airport management, county executive and county council on the airport budget, programs, regulations, master plans and noise reduction strategies and other related matters.

Based on this mission and the timing of the Master Plan project, the Roundtable selected the Master Plan as its first project.

Airport Mission, Values and Vision

The Roundtable first addressed the KCIA mission statement. Roundtable members believe that before a Master Plan can be considered, the Airport's mission must be clear. The Plan should address how the mission should be achieved. The mission statement, values and vision which follow were adopted by consensus of the Roundtable.

RECOMMENDATION: The mission, values and vision statements for King County International Airport should be as follows:

Mission:

The mission of the King County International Airport is to support the economic vitality of the county, to support the national air transportation system, to encourage advanced technology, to provide safe and continuous general aviation airport services to King County businesses and residents and to serve as a gateway to the county. In fulfilling this mission, the Airport will be a good neighbor and an environmental steward and will provide quality facilities to Airport tenants and operators in an efficient, environmentally safe and fiscally prudent manner.

Values:

- Safety is crucial
- Economic vitality
- Responsiveness to the area economy
- Looking to the future
- Environmentally sound
- Collaborative in community
- Innovative
- National leader
- Support state-of-the-art manufacturing

Vision:

By the year 2018, the King County International Airport will be a national leader in developing partnerships with the King County community, businesses and residents to provide airport facilities and services which are environmentally and economically sound and ensure our community's well being.

Planning Process

The Airport Master Plan is a guide for airport management in directing the future development of the airport. The Plan is based on a 20-year planning period for forecasting and capital planning purposes. However, it is assumed that the master plan will be reviewed and updated about every five to ten years to assure that it remains appropriate to current conditions. The last Master Plan for KCIA/Boeing Field was prepared in 1985-7 and adopted by the King County Council in 1987. Many conditions have changed since the last Plan was adopted.

The Master Plan development process involves the following steps with associated public comment periods. A flow chart of these planning steps is shown as Figure 1.

1. Inventory of existing conditions
2. Forecasts of future unconstrained demand for service
3. Analysis of Airport capacity to accommodate forecast demand
4. Development of alternatives
5. Analysis of alternatives
6. Development of a conceptual development plan
7. Environmental review of conceptual development plan
8. Development of a draft plan, including constrained forecast
9. Development of final master plan
10. Adoption of final master plan

Existing Conditions

As a group, the Roundtable did not review work done by the Master Plan consultants on existing conditions. To the extent that the existing conditions present environmental concerns, they should be addressed in the environmental impact statement (EIS), which the Roundtable will review in draft form.

KING COUNTY INTERNATIONAL AIRPORT MASTER PLAN PROCESS

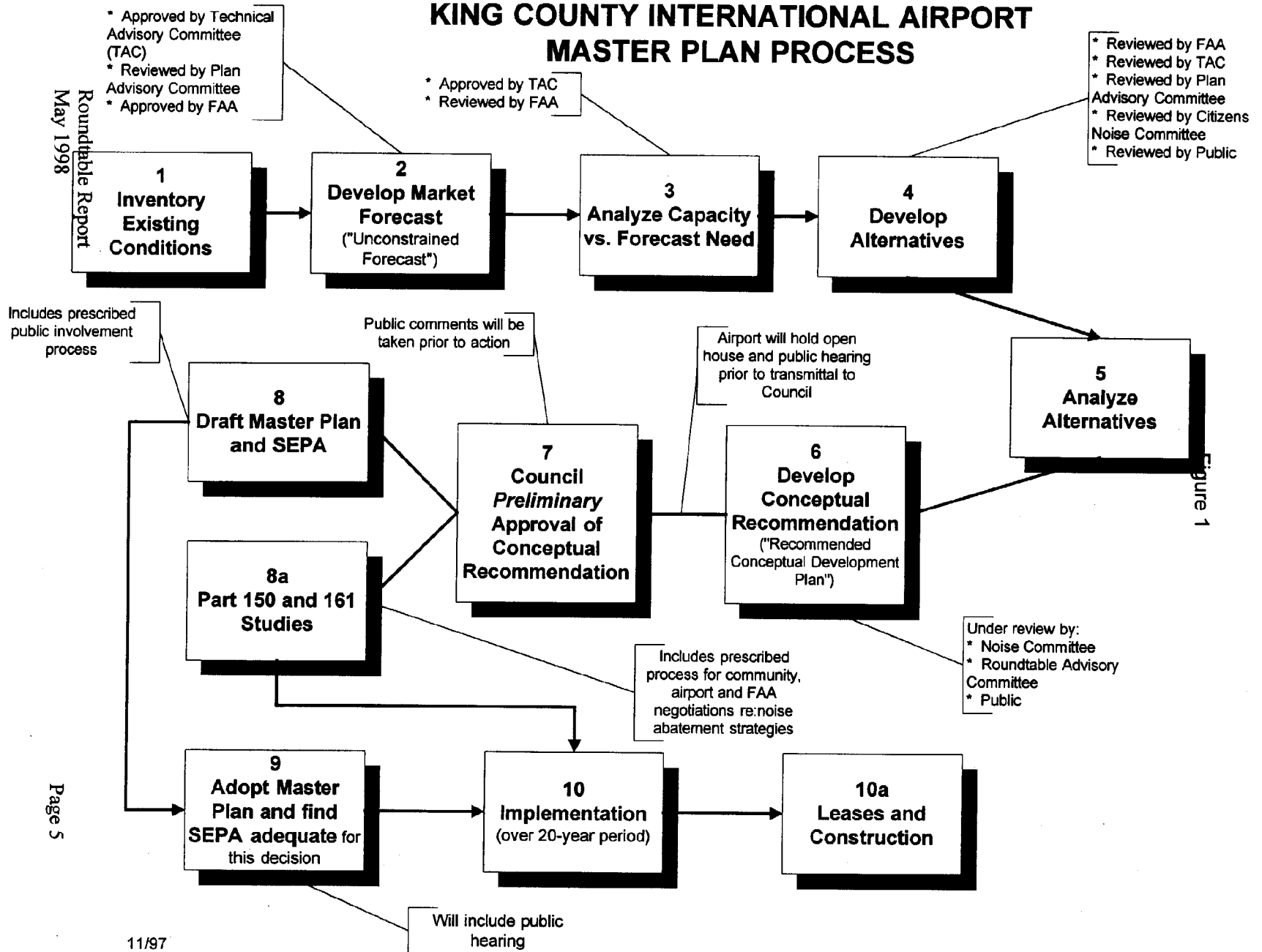


Figure 1

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Forecasts and Capacity

Forecasts of unconstrained demand for the Airport (unconstrained demand is the demand that would exist if there were no constraints on the Airport's capacity to provide service) assume that demand for the Airport's role as a general aviation reliever airport will continue. That is, there will continue to be demand for serving traffic that is largely incompatible with Sea-Tac's operations and there will be growth in demand from each sector of aviation.

| Table 1 Revised Unconstrained Operations Forecast | | | | |
|--|-----------|---------|---------|----------|
| | | 1997 | 2015 | % change |
| Gen Aviation | | 311,313 | 431,800 | 38.7% |
| Military | | 2,243 | 3,000 | 33.7% |
| Air Cargo | | 23,750 | 37,632 | 58.5% |
| Aerospace | | 2,950 | 5,500 | 86.4% |
| Passenger | | 2,000 | 10,200 | 410.0% |
| Air Taxi | | 28,812 | 49,051 | 70.2% |
| Total | | 371,068 | 537,183 | 44.8% |
| Current Operations | Transient | 60% | TBD | |
| | Based | 40% | TBD | |

The Roundtable understands that the entire forecast unconstrained demand for Airport services cannot be met. All alternatives considered by the Plan consultants involved forecast increases over 1997 levels of operations, but none of the alternatives could meet all of the projected future demand. The objective for the Plan is to identify the best uses for the limited amount of developable land surrounding the runway system in light of the high level of demand for that land. The following table portrays the projected use of the Airport under the consultant's proposed conceptual development plan (the "constrained" demand).

| Table 2: Forecast Operations Conceptual Development Plan | | | | | |
|---|---------|-----------------------|---|---------------------------------------|-------------------------|
| | 1997 | Unconstrained 2015 | Projected 2015 per Conc.Dev. Plan | Rec % of Unconstrained Forecast | % Increase over 1997 |
| Gen Aviation | 311,313 | 431,800 | 458,700 | 95.4% | 34.8% |
| Military | 2,243 | 3,000 | 3,000 | 100.0% | 33.7% |
| Air Cargo | 23,750 | 37,632 | 29,400 | 78.1% | 23.8% |
| Aerospace | 2,950 | 5,500 | 5,500 | 100.0% | 86.4% |
| Passenger | 2,000 | 10,200 | 8,700 | 85.3% | 335% |
| Air Taxi | 28,812 | 49,051 | See GA ¹ | See GA ² | |
| Total | 371,068 | 537,183 | 505,300 | 94.1% | 36.2% |

¹ Combined with GA

² Combined with GA

Alternatives

The Airport presented six alternatives and a consultant-recommended preferred alternative for public comment during the fall of 1997. These alternatives each maintained the mix of uses present at the Airport but emphasized a different sector of the general aviation market. These alternatives ruled out closing the Airport, expanding the Airport and provision of major passenger service.

The consultants recommended that two of the six original alternatives be rejected because they did not meet the federal standards of non-interference with interstate commerce and non-discrimination among (classes of) users. Among the remaining four alternatives, one was selected and modified slightly as the consultant recommendation for the conceptual development plan.

During the Fall, 1997 public comment period, the consultants used for developing the Plan changed. At that time it became clear that one key issue was not addressed in earlier work by the previous consultants. The Federal Aviation Administration (FAA) provided a letter that pointed out that the Airport's long runway does not meet federal safety standards. Although this non-conforming condition is not new, FAA policy now requires that airports address non-conforming safety areas when they rehabilitate or construct runways. Since KCIA must perform some runway rehabilitation during the 20-year planning horizon for this Master Plan, the non-conforming condition must be addressed by the Master Plan.

Thus the consultants proposed a different conceptual development plan early in 1998 that ruled out several other alternatives previously considered. This proposal was presented in a public meeting in February 1998 and extensively considered by the Roundtable.

This proposal assumes the following:

- The most feasible method of addressing the non-conforming safety area at the south end of the long runway while maintaining 10,000 feet of runway length for takeoffs in both directions is to pave an additional 800 feet at the north end of the runway and shift the takeoff area 800 feet to the north accordingly. Condemnation of property to the south in order to create a larger (conforming) safety area to the south does not work because of the alignment of the railroad tracks, Airport Way and the freeway; the farther south the safety area is located, the more of these obstructions would actually fall within the proposed safety area.
- Development of the remaining large block of land which remains in non-aviation use (the NW corner of the Airport) for aviation use will not be feasible because no taxiway access will be possible when the runway is shifted to address safety area concerns on the south end.
- A future land use pattern that retains approximately the current configuration (providing the deepest parcels for larger plane activity and reserving the narrower

parcels for small plane activity) is the most efficient way to sustain a balance of uses at the Airport.

- The historic Steam Plant will not be affected by the proposal. Although the current access to the Steam Plant is via right of way granted to the City of Seattle through the runway protection zone at the north end of the runway, a new access route can be developed which will direct Steam Plant traffic out of the safety area and runway protection zone.

Description of Consultant's Recommended Conceptual Development Plan

Figure 2, the last page in this packet, is a map of the consultant's recommended conceptual development plan. This map shows:

- Future 800 foot displaced threshold on the south end of Runway 31L (long runway)
- Potential need to establish a 200 foot displaced threshold on the south end of Runway 31R (short runway)
- Existing and future approach threshold at the current north end of Runway 13R (long runway)
- Proposed 800 feet of new pavement at north end of Runway 13R (long runway)
- Proposed relocation of fuel farm at north end of Airport (future location to be determined)
- Screen wall and plantings at north end of Airport
- Future public access road for Steam Plant (exact route to be determined)
- Consolidated cargo use on parcels immediately to the south of the Terminal and Arrivals Buildings (parcels now known as EMF site and Ameriflight site)
- Consolidated cargo use on several parcels (parcels now known as Airwest Sales and Aerocopters would be aggregated with the existing cargo parcels south of the center of the Airport's east side)
- Consolidated corporate use on parcels between the existing small GA areas and the cargo designated parcels
- Small GA use at the far ends of the east side of the Airport and adjacent (to the north) to the Museum of Flight
- Relocation of the Airport Shop and redesignation as clear zone of a section of the Great Western Soils parcel adjacent to the current Shop site to improve the runway protection zone at the north end of the Airport

Issues

The consultant proposed conceptual development plan raised a number of issues for the Roundtable, as follows:

1. Impacts of proposed runway shift. The Roundtable discussed concerns about impacts to the Georgetown residential area of shifting the runway 800 feet to the north. The Roundtable also discussed whether or not the option to reduce the runway length to 9200

feet might provide an opportunity to restrict traffic at KCIA, thereby aiding in noise reduction.

Although there were strong feelings on the part of some Roundtable members that the best option would be to reduce the effective takeoff runway length to 9,200 feet by addressing the safety area but not extending pavement 800 feet to the north, it was determined that restrictions on use of the Airport for noise reasons must be proposed and studied through a FAR Part 161 Study before they can be implemented. For this reason, runway length reductions for solely this purpose were rejected. Other factors that support maintaining the current runway length of 10,000 feet while establishing a conforming safety area at the south end of the long runway were: 1) the Boeing Company needs 10,000 feet of runway length for takeoffs when performing certain new model aircraft certification tests, and the Boeing Company would incur millions of dollars in costs, and the region would absorb thousands of jobs lost, if the Boeing Company no longer had a functional runway at KCIA; 2) other occasional users of the Airport also need the full 10,000 feet of runway now available at KCIA; 3) Impacts on Georgetown could be mitigated by limiting use of the extended portion of the runway to only the Boeing Company new model certification tests, and other operators could be required (if possible) or strongly encouraged to volunteer to begin their takeoffs to the south at the displaced threshold (current endpoint of the long runway).

RECOMMENDATION: The nonconforming safety area at the south end of the long runway should be addressed and a conforming safety area should be established; however, in so doing, the long runway takeoff length of 10,000 feet should be maintained by adding 800 feet of pavement, provided that the impact of using this shifted runway length is mitigated by limiting use of the northernmost 800 feet to takeoffs for certification testing or weather conditions and asking all other operators to use the current runway end for takeoffs to the south; and is further mitigated by construction of an acoustical wall at the north end of the Airport.

2. *Cargo Operations.* The Roundtable feels that the biggest community objection to KCIA operations is to noise impacts from a variety of air operations. Because they typically occur at dinner time and during pre-wakening hours in the early morning, cargo flights (particularly those in the early morning) generate the most complaints. Projected growth in cargo operations is of concern to many community residents and has been the subject of most community meetings at which airport issues are discussed.

The Roundtable discussed options for displacing cargo operations at KCIA and moving them to Paine Field or Sea-Tac Airport. Representatives of the cargo companies explained that Sea-Tac cannot accommodate new cargo company operations at this time and the cost of serving the greater Seattle area from Paine Field is prohibitive in terms of both time lost and additional cost of truck operations.

The Roundtable also discussed the possibility of restricting cargo operations to daytime hours. Representatives of the cargo companies explained that because of hub connections, the nighttime flights are critical to being able to provide overnight package delivery services to meet public expectations in this region.

There was not consensus on the following recommendation. Several of the community representatives on the Roundtable felt that cargo operations should be restricted by limiting Airport leases to non-cargo businesses and/or that a FAR Part 161 study to close the Airport at night should be undertaken with the intent of eliminating cargo night flights. In addition, several community representatives did not want to approve the consultant proposed land uses until it was known where the noise containment facility referenced below (see Georgetown Impacts section) would be located.

RECOMMENDATIONS:

- **24-hour per day service at KCIA should be continued.**
- **The consultant's recommended land use allocations, which generally parallel current uses, should be accepted.**
- **Noise from all types of existing operations as well as future operations should be addressed in a FAR Part 150 Noise Remedies and Land Use Compatibility Study.**

3. *Impacts on Georgetown.* Among residential neighborhoods, the Georgetown residential area receives the greatest share of impacts from KCIA. These impacts are from a range of activities, including takeoffs and landings and ground operations, including testing being performed on aircraft. Georgetown is concerned about low frequency vibrations and night noise impacts, in particular, and also about emissions from air and ground operations. The following recommendations were made by consensus:

RECOMMENDATIONS:

- **Construct an acoustical wall at the north end of the Airport to reduce noise from Airport operations.**
- **Construct a noise containment facility ("hush house")**
- **While moving the fuel tanks to comply with safety area requirements, also move the tanks away from the Georgetown residential area.**
- **Include strategies to address low frequency vibrations in addition to noise in the Part 150 study.**
- **Proceed with the budgeted air quality study and evaluate its recommendations.**

In addition, the following recommendation was made by majority vote.

- **Mitigate the runway shift, if it is approved, by limiting use of the northernmost 800 feet to takeoffs for certification testing or weather conditions and asking all other operators to use the current runway end for takeoffs to the south**

4. Part 150 Study. A variety of measures were discussed and recommended for the FAR Part 150 Noise Remedies and Land Use Compatibility Study. There was consensus to study all of the strategies listed below and others which remain to be identified in the public scoping process. The Roundtable recognizes that not all of these strategies can or will be implemented but expects that consideration in the Study will lead to the most comprehensive remedies possible.

RECOMMENDATION: The Part 150 Study should consider and analyze a variety of remedies, including but not limited to the following. The Study should not result in just moving the problem and all aspects of the study should be communicated in plain-speak so that they are easily understood by the general public.

- Incentives for operators that are less noisy and use modern technology and for those that restrict night operations
- Pilot training for carriers with scheduled night flights to use quieter flying techniques
- Caps on the accepted noise impacts
- Flight path changes and noise abatement procedures such as flying over the industrial area in the Kent Valley before turning when departing to the south, an over water approach from the north, minimizing reverse thrust cut-backs, delaying final flap landing configuration, and higher angles of arrival and departure
- Combined Sea-Tac and KCIA traffic control
- Installation and use of the earliest possible GPS system to be used by all aircraft flying IFR
- Noise abatement power settings to be used during takeoff
- Strategies to address low frequency vibrations in addition to noise
- Requirement that all operators, even those aircraft below 75,000 pounds, be Stage III
- Strategies to address single event impacts and not just averaged events that create conventional contours
- Strategies to address cumulative impacts accruing to those residing below both Sea-Tac and KCIA traffic
- Economic reparations for residents outside the 65 dnl contour who are significantly impacted by KCIA noise events
- Other facility (acoustical) remedies to protect surrounding communities should be explored

5. Leasing. Several Airport tenants requested that the Roundtable recommend that the leasing moratorium be rescinded. Their arguments were that the planning process has been complex and delayed for a variety of reasons, which has resulted in some tenants being unable to do appropriate business planning. Some Roundtable members believe that it is inappropriate to resume leasing on the Airport until the Plan has been completed and can serve as a policy guide for Airport management; what is appropriate for long term leases is not yet certain. Others stated that because the options for Airport development

are now so narrow, as a result of the safety area issues, and because of the length of time the Plan has taken, leasing authority could be resumed, contingent upon following the conceptual development plan approved by the Council; this would assure the Council was aware of the types of leases likely to be proposed. It was also noted that the Council must approve all long-term leases. The following recommendation received a majority vote but not consensus.

RECOMMENDATION: The moratorium on new and extended long-term leases which was instituted pursuant to Motion 9709 should be rescinded.

6. Other Issues. The Roundtable recognizes that the final Airport Master Plan will contain many other types of policies to guide the Airport which have not been addressed yet by the Roundtable or Airport management. However, the following policy recommendation is one example which was discussed and which received consensus.

RECOMMENDATION: The Airport should put an environmental management system in place if there is not already one and require environmental/soil testing when tenants change. In addition, the Airport should encourage its tenants to work with local government agencies to reduce and substitute for hazardous materials where possible.

